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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,393	04/15/2004	Masaaki Yamaya	0171-1084PUS1	6404

2292 7590 02/14/2006

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EXAMINER

MOORE, MARGARET G

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,393

Applicant(s)

YAMAYA ET AL.

Examiner

Margaret G. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 of 19 is/are pending in the application.
- 4a) Of the above claim(s) 10 to 15, 18, 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 to 9, 16, 17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 to 7, drawn to a coating composition, classified in class 528, subclass 42.
 - II. Claims 8 to 19, drawn to a coated substrate, classified in class 428, subclass 447.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group I and Group II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a coating composition for non-transparent substrates, as an elastomer or rubber film that is free-standing or as a lubricant and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Richard Gallagher on 2/8/06 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 to 7. Affirmation of this election must be made by applicant in replying to this Office action.

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Claims 8 to 19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Subsequent to making this restriction, it became apparent to the Examiner that it would not be an undue burden on the Examiner to include *some* of the non-elected claims in the examination of claims 1 to 7. As a result claims 8, 9, 16 and 17 have been rejoined and are currently under consideration. The Examiner stresses that she still believes the restriction requirement per se to be proper. Thus if applicants were to amend, for instance, claim 8 as a result of this office action to include limitations of a claim that remain non-elected, claim 8 will then be withdrawn from consideration.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 4, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al.

Kim et al. teach fluorocarbon silicone compositions. See for instance the organosilane on line 15 of column 1, as it corresponds to formula (A) in instant claim 1. See for instance examples 1 and 2 on columns 5 and 6 which show compositions meeting claim 1, claims 4 and claim 5. Since the disilane (A) can be 100% of the composition in claim 2, this claim is also met by the teachings in Kim et al.

Kim et al. fail to teach the resulting refractive index of the cured composition. The composition in Kim et al., however, is the same as that found in claim 1. Products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present.

10. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al.

For claim 3, patentees fail to specifically show a combination of a disilane (A) and an organosilicon compound (B) as claimed. The bottom of column 4 teaches that the disilanes in Kim et al. can be admixed with the general formula silane on lines 65 to 70. Example 14 exemplifies such a mixture. The silane on column 11, line 68, differs from the silane (B) only in that (B) requires three hydrolyzable groups while the silane on column 11 only has 2. As can be seen from the general formula on column 4, however, silanes having three hydrolyzable groups are well within the breadth of Kim et al. and can be used in the admixtures therein as easily as silanes having two groups. From this one having ordinary skill in the art would have been motivated by the teachings in Kim et al., particularly Example 14 and the teachings on column 4, to condense a silane of formula (B) with the disilanes taught in Kim et al. with, at least, a reasonable expectation of success.

For claim 6, note that the only difference between the second silane in this claim and that in Example 3 of Kim et al. is that the silane in Kim et al. has terminal Cl hydrolyzable groups rather than alkoxy. Column 3 teaches that alkoxy groups such as methoxy and ethoxy can be used in the alternative with Cl atoms as hydrolyzable

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groups. From this the skilled artisan would have found the use of an ethoxy or methoxy group rather than the Cl atoms shown in Example 3 to have been obvious.

11. Claims 1, 2, 4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai et al.

Arai et al. teach room temperature curable siloxane compositions that include disilane compounds meeting the general formula (A). See particularly column 4, line 44, which shows a disilane meeting (A), including the particular compound in claim 6. Again, since the composition of claim 2 can be 100% of compound (A) this claim is met by Arai et al. as well.

The Examiner relies on the rationale noted supra with regard to the limitation of claim 7, as it will necessarily be present in the composition of Arai et al.

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al.

Arai et al. teach that a silane compound is added to the composition that includes the disilane compound noted above. See column 3. The amounts overlap with those found in claim 3. For instance the silane (B) in Arai et al. can be present in an amount of .5 parts by weight while the disilane (C) in Arai et al. can be present in an amount of 15 parts by weight. Since these amounts are both specifically disclosed by Arai et al. the skilled artisan would have found a composition having compounds in these amounts to have been obvious.

Column 3 exemplifies some silanes that can be used in this composition. Line 28 specifically shows a chlorine substituted alkyl group but column 2, lines 61 and 62, which provide the definition of R^8 in the silane (B), teaches that the alkyl groups can be substituted by either fluorine or chlorine halogen atoms. As such the skilled artisan would have found the modification of the R^8 group in the silane (B) such that it includes a fluorine atom rather than a chlorine atom to have been obvious.

13. Claims 1, 2, 4 to 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoneda et al.

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Yoneda et al. teach a surface treatment composition. As a compound capable of forming a coating film Yoneda et al. specifically show a compound meeting formula (A) as well as preferred claims 4 and 6. See compound A-13 and note column 6, lines 34 and 35, which teaches that C₁₋₄ alkoxy groups are the preferred hydrolyzable groups. Again, since compound (ii) is optional in claim 2 Yoneda et al. anticipate this claim. Column 25, line 15, teaches a solvent amount meeting claim 5.

For claim 7, the Examiner relies on the rationale noted supra. In addition please note column 26, lines 6 to 10, which teaches that the composition therein has a low refractive index.

For claims 8 and 9, see column 26, line 34, which teaches a transparent substrate. This also meets claim 16.

14. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda et al.

Yoneda et al. teach three different compounds that can be used as the compound capable of forming a coating film. Various compounds on column 13 meet the organosilicon compound (B) in claim 3. See for instance B-1, B-5 and B-7. Column 21, lines 52 and on, specifically teach using the compounds A and B as a mixture. This differs from that claimed only in that the amount of A or B in the mixture is not specified. However adjusting the amount of A and B in a mixture would have been well within the skill of the ordinary artisan. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation). For instance, if one were to desire a composition having a mixture of A and B, starting by adding just a slight amount such as 1 wt% of B to a composition of A and increasing the amount in increments would have been an obvious means of determining the optimum amount of B and A. In this manner the amount in claim 3 would have been obvious.

For claim 17, note column 27, line 20, which generally teaches transparent plastic plates. While the particular resins of claim 17 are not taught, the selection of

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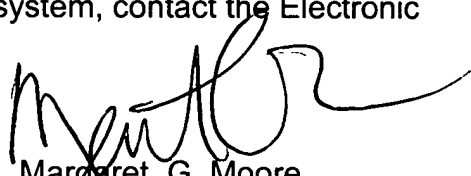
commonly used and well known transparent plastics, such as polycarbonate, would have been obvious to the skilled artisan in view of the teachings of Yoneda et al.

15. Pierce et al. is cited as being of general interest. This reference teaches a disilane within the breadth of general formula (A) but is not as close to the claims as the prior art references cited supra.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
2/8/06